

ABSTRACT

The gas engine electric power generating system in which the electric power generating apparatus composed of an electric power generator connected with a gas engine of a pilot fuel oil ignition type is installed near a coal mine and the recovered methane gas and ventilated methane gas taken out of the mine shaft are introduced into the cylinder of the gas engine while being adjusted to be introduced as a lean methane/air mixture to operate the engine to produce electric power, is established near coal mine in developing country including China, the carbon dioxide emission credit produced by the difference in greenhouse effect index between the case where coal mine methane gas is released to the atmosphere and where said methane gas is utilized by the gas engine electric power generating system to be released to the atmosphere as carbon dioxide, is registered on a emission credit market to be traded with credit surcharge payment obligators(or those who want to purchase the emission credit). The invention also includes the affiliated system of mutual patronage relation constituted by one or a plurality of the systems and nearby power generating system or systems using coal bed methane or pre-mining gas as fuel.